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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,581	04/07/2004	Mark E. Deem	37531-501C02US	8576
20/985 7590 06/09/2008 FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER				
BACHMAN, LINDSEY MICHELLE				
ART UNIT		PAPER NUMBER		
3734				
MAIL DATE		DELIVERY MODE		
06/09/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/820,581

**Applicant(s)**

DEEM ET AL.

**Examiner**

LINDSEY BACHMAN

**Art Unit**

3734

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21, 23-29 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21, 23-29 and 31-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4-22-08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: NPL reference

### **DETAILED ACTION**

This Office Action is in response to Applicant's amendment filed on 29 January 2008.

#### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-3, 5-9, 11-17, 19, 21, 23, 25, 26 rejected under 35 U.S.C. 103(a) as being unpatentable over F. Maisano et al (European Journal of Cardio-thoracic Surgery 13 (1998) 240-246) in view of Aldrich et al. (US Patent 6,355,030).**

Claims 1-3, 5-9, 11-17, 19, 21, 23, 25, 26: Maisano teaches that it is known to apply an annuloplasty ring the annulus of a valve and also apply sutures to adjacent leaflets (last partial paragraph on page 241 to first full paragraph on page 242). Maisano does not teach performing the procedure percutaneously.

Aldrich'030 teaches that it is well known to repair heart valves percutaneously (column 15, line 57 to column 16, line 4) because it is less risky for the patient and requires less recovery time. It would have been obvious to one of ordinary skill in the art to perform the procedure of Maisano percutaneously so that it too has this advantage.

**Claims 4, 10, 18, 20, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maisano in view of Aldrich, as applied to Claims 1, 11, and 21, in further view of Carpentier et al. (US Patent 5,593,435).**

Claim 4, 10, 18, 20, 24: Maisano teaches accessing the valve through the left atrium (last full paragraph on page 241), but Maisano does not teach attaching the ring on the atrial side.

Carpentier teaches that it is known to access the left atrium by crossing the interatrial septum in order to perform maintenance on an annuloplasty ring, which is attached on the atrial side (column 4, lines 43-55; Figure 4). If performing the deployment percutaneously, as discussed by Maisano in view of Aldrich, it would be obvious to use the procedure outlined by Carpentier because the technique for percutaneously accessing the valve though the atrial side was part of the ordinary capabilities of a person of ordinary skill in the art in view of the teaching of the technique for improvement in other situations.

**Claims 27-29 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maisano in view of Aldrich and in further view of Carpentier et al. (US Patent 5,593,435).**

Claim 27-29, 31-35: Maisano teaches that it is known to apply an annuloplasty ring the annulus of a valve and also apply sutures to adjacent leaflets (last partial paragraph on page 241 to first full paragraph on page 242).

Maisano does not teach performing the procedure percutaneously.

Aldrich'030 teaches that it is well known to repair heart valves percutaneously (column 15, line 57 to column 16, line 4) because it is less risky for the patient and requires less recovery time. It would have been obvious to one of ordinary skill in the art to perform the procedure of Maisano percutaneously so that it too has this advantage.

Also, Maisano does not teach attaching the ring on the atrial side.

Carpentier teaches that it is known to access the left atrium by crossing the interatrial septum in order to perform maintenance on an annuloplasty ring, which is attached on the atrial side (column 4, lines 43-55; Figure 4). If performing the deployment percutaneously, as discussed by Maisano in view of Aldrich, it would be obvious to use the procedure outlined by Carpentier because the technique for percutaneously accessing the valve though the atrial side was part of the ordinary capabilities of a person of ordinary skill in the art in view of the teaching of the technique for improvement in other situations.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **LINDSEY BACHMAN** whose telephone number is (571)272-6208. The examiner can normally be reached on Monday to Thursday 7:30 am to 5 pm, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on 571-272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. B./

Examiner, Art Unit 3734

/(Jackie) Tan-Uyen T. Ho/

Supervisory Patent Examiner, Art Unit 3773